The turnkey industrial 3D printer for functional parts in the field

The X7 Field Edition is a ruggedized, field-deployable industrial 3D printer for tactical response to inventory challenges in remote locations. Increase supply chain resilience by printing tools, adapters, and replacement parts for equipment at the point of need. Recover faster when parts break, operate with less on-hand inventory, and minimize equipment downtime with flexible manufacturing. Enable engineers and operators to solve problems from the field, at a fraction of the cost, time, and effort of having parts expedited from the other side of the world.

The X7 FE can be fully set up and ready to print in minutes. The unit contains the materials, spare parts, and tools needed to sustain production between resupply opportunities. The custom Pelican case arrangement can withstand transportation through harsh environmental conditions. Deploy the Digital Forge to remote locations with X7 FE, and reinvent the way you tackle global supply chain challenges.
X7 Field Edition Overview

**Top-of-the line Continuous Carbon Fiber Printer**
- Exceptional Strength: Print continuous carbon fiber composite parts that are stronger than 6061 Aluminum and 40% lighter.
- Maximum Accuracy: Ensure dimensional accuracy for the most critical tolerances with the integrated laser micrometer and adaptive bed leveling.
- Large Build Volume: Print parts as large as 13” x 10.6” x 7.9”.

**System Ready for the Field**
- All-in-One System: Printer pack with all materials, replacement parts, and tools for months in the field.
- Rugged Packaging: Pelican AL3232 single lid case with custom foam modules and moving component locks to mitigate damage during transport. The X7 FE solution has been included in MIL-STD-810 testing in support of a DoD Program of Record.*

**Simple, Smart Software**
- Intuitive Print Preparation: Clean, simple user interface for effortless print configuration, with a suite of onboard utilities for guided printer calibration and maintenance.
- Digital Inventory Management: Fully-featured offline part library with automated version control.
- STIG Compliant Operating System: Enhanced printer security, whether you’re connected to the cloud via satellite hotspot or offline in the middle of the desert.
- Available with and without WiFi connectivity.

**All-in-one system**

1. **AL3232 PELICAN CASE**
   - Rotomolded high-impact polyethylene case protects the printer in harsh environments
   - Eight total spring-back handles for easy carrying
   - Foam padding to protect components during transport

2. **PRINTER LAYER**
   - X7 Industrial Printer
   - Moisture-sealed material storage drybox
   - Upper foam for printer protection
   - 6061 aluminum honeycomb lightweight support layer
   - Integrated ventilation and mating geometry for secure placement on top of case

3. **TOOL LAYER**
   - All tools required for X7 maintenance
   - Consumables storage
   - Main and spare print bed storage
   - Laptop storage area (laptop not included)

4. **MATERIAL LAYER**
   - 3x Onyx plastic spools for more than 100 hours of printing
   - 2x Carbon Fiber Spools
   - 1x Kevlar Spool
   - 1x Fiberglass Spool
   - 1x HSHT Fiberglass Spool
   - Pockets for spare printhead and plastic extruder

*Testing performed and reported by the US Military. Individual results may vary and are not guaranteed.

System in development. GA Fall 2021. Specs may change.